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A National Academy of Sciences panel called for more research into geoengineering as a method to combat climate change in two reports released on February 10. Geoengineering describes "deliberate, large-scale manipulations of Earth's environment that might be used to potentially offset some of the consequences of climate change." These methods include injecting compounds into the atmosphere to increase cloud reflectivity, a higher risk option with quicker results, or capturing carbon from the atmosphere and injecting it into oceans, soil, or underground, which proves lower risk but is slower to make an impact on global CO2 levels. The panel proposed a series of small-scale, closely-monitored experiments to explore ways that scientists can counter recent warming. The recommendations focus on developing baseline knowledge of whether and how various geoengineering methods work. Geoengineering opponents argue that these experiments present a "moral hazard" and that they may have unintended, adverse, worldwide impacts. The panel disagreed, stating that society has "reached a point where the severity of the potential risks from climate change appears to outweigh the potential risks from the moral hazard" of conducting geoengineering experiments. Marcia McNutt, former Director of the U.S. Geological Survey and current Editor of *Science*, chaired the 16-member panel. The reports were sponsored by the U.S. intelligence community, the National Oceanic and Atmospheric Administration (NOAA), NASA, the Department of Energy, and the National Academy of Sciences.

Sources: E&E News, National Academy of Sciences, NY Times